

**Rombough, Kyrik**

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**From:** Colin Campbell [campbell@rtpenv.com]  
**Sent:** Thursday, May 15, 2008 7:09 AM  
**To:** Rombough, Kyrik  
**Subject:** Hyperion air permit application - supplemental information

Mr. Rombough,

I have attached additional information supplementing our PSD permit application submitted on December 20, 2007. Most of the supplemental information is responsive to the requests in your letter dated February 20, 2008. This information can be summarized as follows.

- 1) DENR asked for a quantitative description of the effectiveness of air pollution control options that were not selected as BACT because they are less effective than the option selected. The attached item 1 provides the requested information.
- 2) DENR requested completed permit application forms for several pieces of equipment for which forms had not been provided. The attached item 2 provides the requested forms.
- 3) DENR requested that we provide the maximum designed operating rate for several pieces of equipment for which application forms had been provided previously, but for which no operating rate had been specified because emissions were not calculated based on operating rate. The attached item 3 provides the revised application forms with the requested information.
- 4) DENR asked for electronic copies of appendix D to the permit application, the spreadsheets used to calculate cost effectiveness of air pollution control options that were not selected as BACT because they are not cost effective. The attached item 4 includes the requested spreadsheets.

In addition, we are providing information identified by RTP and Hyperion as having been inadvertently omitted from or inaccurately represented in the initial application. This information can be summarized as follows.

- We discovered that we had omitted from the air permit application and the air quality impact analysis the coker unit steam vents that will exhaust to atmosphere prior to the decoking step in each cycle. Completed permit application forms for this process have been provided in item 2. Revised permit application text, including BACT analyses, are included in the attached item 5. Emissions calculations have been added to the revised appendix C, included as item 6. The air quality impact analysis has been revised and is attached as item 7. (The dispersion modeling input and output files on CD-ROM will be sent under separate cover.)
- In conjunction with preparing the health risk assessment, we refined the calculations for emissions of organic hazardous air pollutants from the process heaters. (In the initial permit application, we had conservatively assumed that the organic HAP emission rate was equal to the VOC emission rate. For the health risk assessment, we determined emission rates for speciated organic compounds.) These changes are reflected in the attached item 6.
- We discovered errors in the calculated and modeled emission rates for the combined cycle gas turbines and the diesel engines. The revised emission calculations are presented in the attached item 6. The air quality impact analysis included as item 7 also reflects these changes.
- We discovered that the flare stack diameters included in the initial air quality impact analysis were incorrect. The corrected values are reflected in the attached item 7.

Thank you for your attention to this matter.

Colin Campbell

06/09/2008